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09/05/99 APPLICATION NO.	05/10/99 FILING DATE	FIRST NAMED INVENTOR N	ATTORNEY DOCKET NO.
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1100 NEW YORK AVENUE
WASHINGTON DC 20005

MM41/0824

EXAMINER DOMBROSKE, G

ART UNIT 2855	PAPER NUMBER
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DATE MAILED: 08/24/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

9/196129

Applicant(s)

KATAFUCHI et al

Examiner

DOMBROSKE

Group Art Unit

2855

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-14 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-14 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

1. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103 as being unpatentable over Hayakawa et al.

Hayakawa et al. suggest an invention including the features of claim 1, but without explicitly setting forth the claimed quantitative dimensional relationships. However, inspection of the patent (including Fig. 2) reveals that, at the very least, it would have been obvious to construct a Hayakawa-like sensor having dimensional relationships as claimed- particularly because no critical significance appears to attach to the the exact values claimed.

Hayakawa et al. show the features of claim 2.

Hayakawa et al. show the features of claim 3, subject to the foregoing discussion of the obviousness of the claimed dimensional relationships.

Hayakawa et al show the features of claim 4.

Regarding claim 5, it would have involved only routine skill to form the electrodes by any suitable known and desired process, including electroplating, since structure formed by any such process would function in a manner equivalent to that formed by any other known process.

The substance of claims 6-14 is also suggested by Hayakawa et al., with the exceptions of (1) the particularly claimed relative dimensional relationships and (2) the particularly claimed fabrication methods (such as the plating of claim 10). However, as discussed *supra*, it is believed

that it would have been obvious to a routineer in the art to fabricate a Hayakawa-like sensor using any available and convenient fabrication technology, and to use dimensional relationships as claimed.

3. The prior art made of record and not relied upon is considered pertinent to the Applicant's disclosure.

Additional references have been cited to further resolve the level of skill of a routineer in the art at the time of the Applicant's invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George M. Dombroske, whose telephone number is (703) 308-6721.

The fax phone number for this Group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.



George M. Dombroske
15 August 1999

George M. Dombroske
15 August 1999